5

10

15

20

Abstract of the Disclosure

A process control system that automatically monitors processes and performs activities based on conditions detected during monitoring. The information needed to do the monitoring and perform activities is contained in tables in a database system. The process control system may be configured by configuring entries in the tables. An administrative query table has records that define administrative queries. Each administrative query has associated with it a query to be executed on a table of process records that indicate statuses of the processes being monitored, a scope that defines a subset of the process records upon which the query is to be executed, a schedule from which a time of next execution of the administrative query can be computed, and an activity. The activity is a set of one or more actions. When an administrative query is executed and the query associated with the administrative query is run on the table of process records and the result set is not empty, the activity is performed with regard to the process records of the result set. Also disclosed are a graphical user interface for defining administrative queries, administrative activities, and activity types and for posting activities as well as techniques for configuring activity types so that an activities of the type can set user-defined fields in a process record in conjunction with the posting of the activity with regard to a process. A disclosed use of the technique is mapping values from fields of records for posted activities to user-defined fields in the PR record for the process, which in turn makes it possible to query the PR records on those fields.

25